



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,323	12/04/2001	Masayuki Mishima	Q67519	9759
7590 08/31/2004 SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, NW Washington, DC 20037-3213			EXAMINER COLON, GERMAN	
			ART UNIT 2879	PAPER NUMBER

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

10/000,323

Applicant(s)

MISHIMA, MASAYUKI

Examiner

German Colón

Art Unit

2879

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-20.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because: Applicant argues that the Examiner has not provided sufficient reasons why one of ordinary skill in the art would have been led or motivated to combine Moriyama and Tsai or Baldo, Yasukawa and Tsai.

However, it is the Examiner's position that avoiding the detrimental effects of moisture and oxygen, such as peeling off or degeneration of the electrode layers, which result in dark spots and decrease in the lifetime of the device, are sufficient reasons to motivate a person of ordinary skill in the art to combine the teachings of the references. The reasons for combining need not be the same as Applicant's.

Moriyama discloses the detrimental effects of oxygen and moisture in the OLED, but is silent regarding their concentrations within the sealed atmosphere.

Tsai discloses the detrimental effects of both oxygen and moisture and teaches a limit to their concentration within the sealed device.

The proper question is: would a skilled artisan reading Moriyama, who discloses the adverse effects of oxygen and moisture to an OLED, entertain the idea of controlling their concentration to the amounts taught by Tsai to avoid those adverse effects? Applicant has not persuasively argued that such a combination is improper.

Applicant argues that the cited references do not disclose or suggest the particular method for producing a light-emitting device, specifically, that the back side electrode and sealing parts are disposed in an inert gas atmosphere having the claimed moisture and oxygen concentrations.

It seems to be Applicant's position that the inert gas atmosphere introduced between the light-emitting layer and the sealing parts had a specified concentration of oxygen and moisture prior sealing of the device. Based on the arguments, the claims should be read as including additional limitations such as providing a chamber (like a vacuum chamber); controlling an atmosphere inside the chamber; placing a substrate on said chamber; forming the organic layers and electrodes on said substrate; and sealing the device.

However, the claims do not recite those limitations. The claims only recite that the final product or step, i.e. after sealing the device, the atmosphere has a particular concentration. The cited references teach the organic layers, the back side electrode, an at least a side of the sealing parts being in an atmosphere with specific oxygen and moisture concentrations.

Even if the claims recite the necessary structure or steps to include a chamber with a controlled atmosphere, the claims will not be patentably distinguished from the prior art for the following reasons:

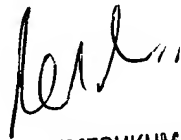
First, the detrimental effects of oxygen and moisture are well known in the art (evidenced in the cited references);

Second, sealing steps within chambers to avoid contamination of the device are well known in the art;

Third, providing an inert gas between the substrates of a light-emitting device is well known in the art (evidenced in the cited references);

Fourth, the desired concentration of oxygen and moisture to avoid adverse effects are well known in the art (evidenced in the cited references).

Thus, even if the argued structure or steps were claimed, one of ordinary skills in the art would entertain the idea of using, during the process of sealing the light-emitting device, an inert gas having a moisture and oxygen concentration in an amount substantially equal to the desired final amount in order to reduce the number of manufacturing steps, i.e. an additional step for reducing the amount of oxygen and moisture in the gas.


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800